

Remarks

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

The courtesy extended by the Examiner to the Applicants' representatives at the Interview on August 22, 2006 is greatly appreciated. Applicants appreciate that the Examiner discussed the proposed claim amendments.

The above amendments to claims 1, 32, and 37 are the same as the proposed amendments discussed with the Examiner during the Interview, except that claim 1 is further amended to recite that the first inner flexible liner can also be located on the liner to improve the readability of claim 1 in view of claim 2. Support for this additional amendment can be found in claim 2 and throughout the specification. To maintain consistency throughout the dependent claims, similar amendments have been made to claims 2, 14, 15, 33, 44, and 50, all of which depend upon claim 1.

To expedite the allowance of this application, withdrawn claims 63-79, which are directed to Group II, have been canceled without prejudice. Additionally, other claims in Group I which are not dependent directly or indirectly on claim 1, *i.e.*, withdrawn claims 51-62 and 80-110, have also been canceled without prejudice.

New claims 111-128 have been added to more fully describe the invention. Independent claim 111 recites that the insert is in contact with the first fuel contained in the first flexible fuel liner. Support for claim 111 can be found in the elected Figure 4 of the present invention and on pages 9 and 10 of the specification, among other places. Therefore, independent claims 111 reads on elected Species 2 of Group I, which includes Figure 4. Support for dependent claims 112-128 can be found in currently pending dependent claims 2-50.

Consideration of claims 1-50 and 111-128 is respectfully requested.

Rejections under 35 U.S.C. § 112

Claims 32 and 37 are rejected as being indefinite. The Examiner asserts that these claims include elements not actually disclosed, specifically the phrase “poppet-type valve” describing the first and second relief valves, and that the scope of the claims is therefore unascertainable.

To clarify the scope of the claims and to move the case toward allowance, Applicants have amended both claim 32 and claim 37 to recite a “poppet valve.” Poppet valves are well-known in the art, and Applicants therefore submit that the rejections under 35 U.S.C. § 112 have been overcome.

Rejections under 35 U.S.C. § 102

Claims 1-9, 14-15, 17-32, 38-47, and 50 are rejected under 35 U.S.C. § 102(e) as being anticipated by Lawrence *et al.*, U.S. Pub. No. 2002/0197522, heretofore Lawrence. The Examiner asserts in the Office Action dated May 30, 2006 that Lawrence discloses a fuel cartridge comprising a flexible fuel bladder containing fuel, and that the fuel itself could be a *per se* insert. In the Office Action dated July 18, 2006, in response to Applicants’ arguments, the Examiner again stated that the fuel could be a *per se* insert, and noted that “[n]othing in the present claims clearly stipulates that fuel is not an insert, or that the insert is not fuel, or that the claimed insert is at least different from the fuel.” See July 18, 2006 Office Action at paragraph 19.

The currently amended claim 1 now recites, among other things, that the “insert is different than said first fuel.” Because the insert described in claim 1 is now specifically described as being different than the first fuel contained in the first inner flexible liner, the first fuel *per se* cannot be the insert claimed in amended claim 1. As such, Applicants respectfully submit that amended claim 1 is patentable over Lawrence.

Claim 1 is also rejected as being anticipated by Acker *et al.*, U.S. Patent No. 6,460,733, heretofore Acker. The Examiner asserts that Acker discloses a fuel container including an

outer casing, an inner tank which is a flexible bladder, and an additive that may be placed within the inner tank, citing column 6, lines 53-69.

Amended claim 1 recites, among other things, a fuel cartridge that comprises a first inner flexible liner containing a first fuel and an insert disposed within or on the first inner flexible liner. On the other hand, in column 6 Acker discloses that when the fuel is stored inside the flexible container, the additives are stored outside of it. While Acker also discloses in column 6, lines 56-59 that the additives may be stored within the inner tank, when this is done, the fuel is disposed within the outer container. Therefore, amended claim 1 is patentable over this reference.

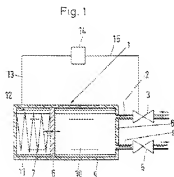
Claim 1 is also rejected as being anticipated by Prasad *et al.*, U.S. Pub. No. 2003/0082427, heretofore Prasad. The Examiner asserts that Prasad discloses a fuel supply including a fuel storage area, a fuel outlet, a waste storage area, a waste inlet, and a movable barrier separating the fuel storage area and the waste storage area. The Examiner further asserts that because each of fuel solution outlet 28 and waste inlet 30 includes a redundant self-sealing valve system, it has an insert and anticipates claim 1.

Amended claim 1 now includes the limitation that the insert is different than the fuel outlet to distinguish it from Prasad.

In the July 18, 2006 Office Action the Examiner further asserts that elements 80, 82, and 84 can be inserts. These elements at best may be involved with the transport of waste materials from the fuel cell back to bladder 44 and storage area 26. On the other hand, amended claim 1 requires that the insert facilitates the transport of this first fuel from the fuel cartridge to a fuel cell. Elements 80, 82 and 84 in *Prasad et al.* are related to the storage of waste products in a liner different than the fuel liner, and cannot perform the function of facilitating the transport of fuel (or waste products) to the fuel cell.

Claim 1 is also rejected as being anticipated by *Herdeg et al.*, U.S. Patent No. 6,610,433. The Examiner asserts that Herdeg discloses a fuel tank having a cavity of variable size and a mechanism for compressing the fuel cavity. *See* July 18, 2006 Office Action at paragraph 22. The Examiner further asserts that Herdeg has an insert because the fuel cavity

shown in FIG. 1 below is bounded by a cylindrical inner wall 9, a circular end surface of the fuel tank, and an intermediate wall 6, and thus anticipates claim 1, *see id.*



Applicants have amended claim 1 to include the limitation that the fuel cartridge comprises “an outer casing enclosing a first inner flexible liner.” Therefore, fuel cavity 10 and space 11 of Herdeg cannot be interpreted to be an outer casing enclosing an inner flexible liner such as claimed in amended claim 1. As such, Herdeg does not anticipate amended claim 1.

Furthermore, the Examiner in the July 18, 2006 Office Action requests objective evidence that no minimum residual amounts of fuel are left in space 11. Applicants respectfully direct the Examiner’s attention to column 4, lines 14-20 of Herdeg, which provides that “intermediate wall 6 is designed to have a form fit with the cylindrical inner wall 9, in order to ensure that the fuel cavity 10 is sealing in relation to remaining space 11.” Fuel is not present in space 11, and the seal as disclosed by Herdeg prevents fuel from entering space 11. As such, spring 7 is not an insert disposed in an inner flexible liner containing fuel, and Herdeg does not anticipate amended claim 1.

Finally, claim 1 is rejected as being anticipated by Kinkelaar *et al.*, U.S. Pub. No. 2003/0008193, heretofore Kinkelaar. The Examiner asserts that Kinkelaar discloses a liquid fuel delivery system for a fuel cell that includes a liquid fuel container and a reservoir structure within the container from which the fuel may be metered. The Examiner further asserts this reservoir structure constitutes a liner, in paragraph 23 of the July 18, 2006 Office Action.

Claim 1 has been amended to include the limitation that “said first inner flexible liner isolates said first fuel from a portion of said outer casing.” The disclosed reservoir structure in

Kinkelaar is a porous wicking structure, similar to a sponge. Unlike the claimed liner in amended claim 1, the liner of Kinkelaar cannot isolate the fuel from any part of the container (outer casing). As such, Kinkelaar does not anticipate amended claim 1.

Because claim 1 is not anticipated by any of the above references, it is patentable. Claims 2-9, 14-15, 17-32, 38-47, and 50 all depend upon claim 1 and add further limitations thereto, and therefore are patentable for that reason alone. Applicants reserve the right to further support the patentability of these claims, should that become necessary.

Rejections under 35 U.S.C. § 103(a)

Claims 16, 33-37, and 48 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lawrence *et al.*, U.S. Pub. No. 2002/0197522, in view of Prasad *et al.*, U.S. Pub. No. 2003/0082427. In order for an obviousness rejection to be appropriate under § 103(a), the combination of references must teach or suggest all of the claim's limitations. However, for the reasons stated above in the 35 U.S.C. § 102(e) rejection discussion, neither Lawrence nor Prasad teach all of the limitations of newly amended claim 1. Because claims 16, 33-37, and 48 depend upon claim 1 and recite further limitations thereto, they cannot be rendered obvious by Lawrence in view of Prasad and are patentable.

Claim 49 is rejected under § 103(a) as being unpatentable over Lawrence in view of Prasad as applied to claim 48, and further in view of Ramanathan *et al.*, U.S. Pub. No. 2004/0096610. The Examiner asserts that Ramanathan discloses that it is known in the art to make fuel tanks by using polytetrafluoroethylene. However, Ramanathan does not teach or suggest all of the other limitations of newly amended claim 1 that are not taught by Lawrence or Prasad. Claim 49 depends upon claim 1 and adds further limitations thereto, and is therefore patentable in view of Lawrence, Prasad, and Ramanathan.

Applicants reserve the right to support further the patentability of these claims, should that become necessary.

New claims 111-128

As stated above, this group of claims is presented to better define the invention and reads on the elected Group and species. Claim 111 is the only independent claim in this group, and recites a “first inner flexible liner comprises an insert in contact with [a] first fuel to facilitate the transport of said first fuel ... through a fuel outlet to the fuel cell, wherein said insert is different than said first fuel and said fuel outlet, and wherein said first inner flexible insert isolates said first fuel from a portion of said outer casing.” None of the art of record, namely Lawrence, Acker, Prasad, Herdeg and Kinkelaar, discloses these elements. Hence, these claims are presently patentable

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Sixty-eight claims including two independent claims are pending, and Applicants previously paid for 110 claims including eight independent claims. Hence, no additional fees are due for the claims. Applicants also believe that no fees or petitions for extensions of time are due in connection with the submission of this Response other than those provided for in the Request for Continued Examination. If any extension of time is required, it is hereby petitioned for under 37 C.F.R. § 1.136, and if any required fee is due, the Commissioner may charge appropriate fees to H.T. Than Law Group, Deposit Account No. 50-1980.

Prompt and favorable consideration of this Amendment and Request for Continued Examination is respectfully requested.

Respectfully submitted,

Date: August 30, 2006

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Attachments:

Request for Continued Examination Transmittal Form (SB-30)